Orchard Corner, Wedmore, Somerset

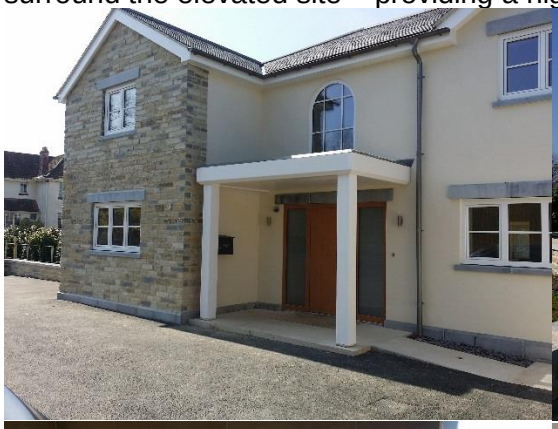
Client:
Private Client

Contract Administrator:
Mark Lovell, Mark Lovell Design, 6 High Street, Devizes, Wilts SN10 1AT
Tel: 01380 724 213 email: team@mlde.co.uk

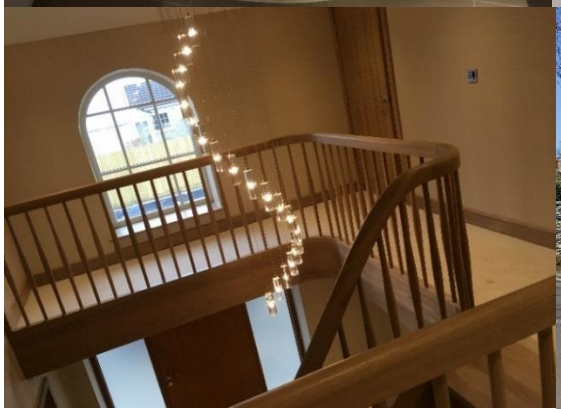
Scope of Works:
This low energy executive Passive House (Passivhaus) house with double garage, was constructed using a 'fabric-first' approach with high thermal performance cavity walls and tiled roof and triple pane double low-e glazing, on a site where an existing bungalow was demolished. The ground level was reduced to allow a two story house not to exceed the original ridge height.

The new house was built to Passive House standard using robust construction methods to reduce air permeability to 0.57m³/hm²@50Pa and additional insulation to allow the efficient use of Mechanical Ventilation and Heat Recovery to provide good indoor air quality. Passive House Certification was awarded in 2017.

A new stone-faced retaining wall, in parts more than 2m high, has been constructed to surround the elevated site – providing a high quality feature wall within the village.








Contract Value: £970K **Contract Programme:** 52 weeks completed 02/17

Certificate

Certified Passive House Classic

cocreate

Cocreate Consulting
54 Claremont Road
London
E7 0PZ

Authorised by:

Passive House Institute

Dr. Wolfgang Feist
64283 Darmstadt
Germany

Orchard Corner
Dando's Lane, Wedmore, BS28 4DB, United Kingdom

Certified Passive House
Passive House Institute
classic | plus | premium

Client	Dr Dennis Briaris The Beeches, Great Somerford SN15 5JG Chippenham, United Kingdom
Architect	Mark Lovell Design Engineers 6 High Street SN10 1AT Devizes, United Kingdom/ Britain
Building Contractor	Rigg Construction (Southern) Ltd Lancaster House, Lancaster Park, Bowerhill SN12 6TT Melksham, United Kingdom
Energy Consultant	Greengauge Building Energy Consultants 54b Frome Rd BA15 1LA Bradford on Avon, United Kingdom

Passive House buildings offer excellent thermal comfort and very good air quality all year round. Due to their high energy efficiency, energy costs as well as greenhouse gas emissions are extremely low.

The design of the above-mentioned building meets the criteria defined by the Passive House Institute for the 'Passive House Classic' standard:

Building quality		This building		Criteria	Alternative criteria
Heating					
Heating demand	[kWh/(m²a)]	16	≤	15	-
Heating load	[W/m²]	10	≤	-	10
Cooling					
Frequency of overheating (> 25 °C)	[%]	2	≤	10	
Airtightness					
Pressurization test result (n_{50})	[1/h]	0.6	≤	0.6	
Non-renewable primary energy (PE)					
PE demand	[kWh/(m²a)]	78	≤	0	

The associated certification booklet contains more characteristic values for this building.

London, UK
Certifier: Will South, Cocreate